PGI30
COST-UTILITY ANALYSIS OF SOFOSBUVIR FOR TREATMENT OF GENOTYPE2 CHRONIC HEPATITIS C IN JAPAN
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OBJECTIVES: To conduct a cost-utility analysis of sofosbuvir for genotype 2 chronic hepatitis C virus (HCV) infection in Japan. **METHODS:** The Markov-model, "Sofosbuvir cost-effectiveness model", which was constructed originally for similar study in UK, was modified and used for this analysis, while imputed data were replaced with Japanese data, as far as possible. Various health states, such as non-cirrhotic hepatitis, sustained virological response (SVR), compensated cirrhosis, decompensated cirrhosis and hepatocellular carcinoma were incorporated to the model. Analyses were conducted for 4 scenarios, classified by treatment history (naive/experienced) and eligibility for interferon. Peg-interferon alpha with ribavirin was set as a comparator for those who were eligible for interferon. No treatment was selected for those who were not eligible for interferon. Probability of SVR was derived from clinical trials conducted in Japan. Other transition probabilities and utility scores of each health state were obtained from published data in Japan. Cost data for interferon-alpha and ribavirin were derived from national drug tariff (2014). For sofosbuvir, average European price was adopted since it was not yet approved in Japan. Other cost data, such as costs related to health states, were mainly obtained from claim data, provided by JMDC (Japan Medical Data Center). Inc. Time-horizon was set to lifetime. Costs and outcomes were discounted with 2% per annum, according to Japanese guideline. **RESULTS:** For interferon-unsuitable patients, sofosbuvir was dominant to no-treatment. Sofosbuvir would save overall costs for JPY990,000 (USD9,900, JPY100=USD1) and prolonged 6.20QALY for treatment naive patients. It would save JPY 837,000 and prolonged 6.08QALY for treatment experienced group, For interferon-suitable patients, sofosbuvir would increase overall costs for JPY3,270,000 and prolonged 2.23QALY for treatment-naives. It would increase JPY1,551,000 and prolonged 2.36QALY for treatment-experienced. ICER were JPY1,470,000 and JPY657,000 per QALY gained, respectively. **CONCLUSIONS:** Sofosbuvir was considered to be cost-effective for treatment of genotype-2 HCV patients in Japan.

PGI31
COST-UTILITY ANALYSIS OF FIDAXOMICIN COMPARED TO VANCOMYCIN IN THE MANAGEMENT OF SEVERE CLOSTRIDIUM DIFFICILE INFECTION IN POLAND
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OBJECTIVES: In recent years a number of infections caused by Clostridium difficile has been significantly increasing. In Poland oral metronidazole constitutes the therapy of choice of non-severe infection and first-recurrence, while oral vancomycin is recommended to be given in case of severe disease and subsequent recurrences. Fidaxomicin is a novel treatment for Clostridium difficile infections (CDI). The aim of this study was to perform a cost-utility analysis of fidaxomicin for the treatment of severe CDI compared to vancomycin. **METHODS:** A meta-analysis of two randomized clinical trials phase III comparing oral fidaxomicin and oral vancomycin in CDI was conducted. A Markov model was used to determine the cost-utility of fidaxomicin in patients with severe CDI. The cycle length was 10 days and the time horizon was 1 year. The patient entered the model in the severe CDI health state and was given either fidaxomycin or vancomycin for 10 days. The analysis was performed from the third-party payer perspective – the Polish National Health Fund. Only direct health care costs (drug costs, hospitalization) were included. Given the lack of formal utility measures for CDI, the utilities for the alternative health states described in the literature were adapted. **RESULTS:** In the base case, fidaxomicin was dominant compared to vancomycin, resulting in cost savings of PLN 905 and an incremental QALY gain of 0.015. Fidaxomicin was associated with higher cost savings (PLN 30,883) assuming that patients with severe CDI would be hospitalized at intensive care unit. One-way sensitivity analyses revealed that fidaxomicin remained dominant even if considering marginal values of both antibiotics' acquisition cost. **CONCLUSIONS:** Fidaxomicin was dominant compared to vancomycin, generating additional QALYs with cost-savings in severe CDI patients in Poland.

PGI32
ECONOMIC EVALUATION STUDIES IN GASTROENTEROLOGY IN BRAZIL: A SYSTEMATIC REVIEW
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OBJECTIVES: The aim of this study was to systematically review the economic assessment studies carried out in Brazil, published between January 1980 and December 2013, assessing the technologies studied, study types, the and temporal evolution and quality. **METHODS:** We systematically searched in MEDLINE (PubMed), EMBASE, LILACS, SciELO, NHS EED, HTA Database (CRD), BVS ECOS, SCOPUS, Web of Science, and SISREBRATS. We selected partial and full economic evaluation studies in gastroenterology, where at least one of the authors was affiliated to a Brazilian institution. Two authors performed study selection and data extraction independently. Disagreements were resolved through discussion or through consultation with a third reviewer. The study characteristics were summarized in figures and summary tables. **RESULTS:** Forty studies were included. The first studies were published in the 80s, but most occurred after 2000, with greater frequency in the last 4 years. Seventeen economic evaluations were incomplete (42.5%) and 23 complete (57.5%). In the 23 complete reviews, 11 (47.8%) studies were cost-utility analysis, 7 (30.4%) were cost-effectiveness analysis, 4 (17.4%) cost-consequence analysis, and 1 (4.3%) cost-minimization analysis. The type of technology evaluated was mainly medications in 25 studies (62.5%), 7 (17.5%) medical and surgical procedures, 3 (7.5%) medical and hospital equipment, 1 (2.5%) vaccines and 4 (10%) evaluated more than one type of technology. When classified by disease, 22 (55%) were studies on viral hepatitis, and in its most published after the year 2010 (63.4%). Five studies were related to digestive cancers and other included peptic diseases, hernias and other. **CONCLUSIONS:** There was a considerable increase in publications of economic evaluations in Gastroenterology in Brazil, being mostly studies of drugs for treatment of viral hepatitis. The high cost of these treatments and increased of lawsuits seem to account for this increase.

PGI33
ESTIMATING THE COST OF LIVER TRANSPLANTATION IN PATIENTS DIAGNOSED WITH CHRONIC HEPATITIS C AND B IN THE UK
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OBJECTIVES: Liver transplantation is an effective treatment option for end-stage liver disease and acute liver failure, including patients with hepatitis C (HCV) and hepatitis B (HBV). Recent health technology assessments of treatments for HCV and HBV have relied on data from a large cohort study of transplanted patients to inform estimates of costs of liver tranplantations; however this was conducted in the 1990s. The overall aim of this study was to estimate the current cost of liver transplant for patients with HCV and HBV in the UK. **METHODS:** Historical summary data from the original cohort study were updated to reflect current unit costs and key changes in clinical practice. Semi-structured interviews were conducted with experts and a computer-based user-interface was developed to elicit estimates of key resource use items. Uncertainty in the experts' estimates was captured by eliciting probability distributions for each item from each expert. Updated unit costs were obtained from national sources. Data were analysed by phase of the transplant procedure. **RESULTS:** The expert elicitation exercise included two hepatologists, three transplant surgeons and one liver transplant coordinator. Few patients with HBV are now being transplanted due to improvements in anti-viral treatments. Mean total costs for patients with HCV were £18,055 pre-transplantation, £64,452 during the transplant phase and £36,009 in two years post-transplant. The average cost per transplanted patient with HCV from assessment to two years post-transplant is £111,810. **CONCLUSIONS:** There have been some significant changes in clinical practice since the original study such as change in standard immunosuppressant therapy, more patients with co-morbidities being placed on the transplant waiting list, increased use of sub-optimal organs and reluctance to re-transplant patients with graft failure and recurrence of HCV.

GASTROINTESTINAL DISORDERS – Patient-Reported Outcomes & Patient Preference Studies

PGI34
ADHERENCE RATES FOR PEGINTERFERON + RIBAVIRIN COMPARED WITH TELAPREVIR + PEGINTERFERON + RIBAVIRIN IN MEDICAID AND COMMERCIAL PATIENTS TREATED FOR CHRONIC HEPATITIS C
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OBJECTIVES: Prior to approval of telaprevir (TPV), the treatment for chronic hepatitis C virus (HCV) included peginterferon (P) weekly injections and ribavirin (R) orally twice daily. In 2011, TPV was approved for coadministration with P+R during the first 12 weeks. Though TPV improved viral clearance, it also increased the treatment complexity by 2 pills given 3 times a day. The impact of increased regimen complexity on adherence is not well understood. This study compared treatment adherence over 24 weeks in HCV patients treated with TPV+PR compared to those on PR. **METHODS:** Large US commercial and Medicaid health insurance claims databases were used to identify HCV patients initiating treatment with PR (pre-TPV [2007 to 2009]) or TPV+PR (post-TPV [2011 to 2013]). The index date was the date of HCV treatment initiation. Adherence was measured by medication possession ratio for all patients at 4 week intervals thru 24 weeks. Regression analyses adjusted for age, sex, comorbidities, liver disease severity, and pill count prior to HCV treatment. **RESULTS:** The study included 7,601 and 1,487 treated HCV patients in the commercial and Medicaid databases. Unadjusted and adjusted adherence was high for both cohorts throughout the study period (>88% for Medicaid and >82% for the commercial at 24 weeks). Adherence was not significantly different between the PR and T+PR cohorts at any time point in the Medicaid patients (88.9% [TPV+PR] and 90.5% [PR] at 24 weeks). Adherence was also similar between the cohorts in the commercial patients (82.7% [TPV+PR] and 83.2% [PR] at 24 weeks) but was statistically different at weeks 8 and 12, though not clinically meaningful. Age was the only factor consistently associated with adherence. **CONCLUSIONS:** Among HCV patients, adherence rates were high and were similar between the cohorts, despite the higher daily pill count for patients on TPV+PR.

PGI35
QUALITY OF LIFE OF DIARRHEAL CHILDREN AND CAREGIVERS IN THAILAND
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OBJECTIVES: To estimate the utility scores for diarrheal children aged under 5 years and their caregivers and to identify the influencing factors which affected on these. **METHODS:** Hospitalized diarrheal children aged between 2 months and 5 years and their caregivers at were recruited in this cross-sectional study at three hospitals in Phetchabun province. The EQ-5D instrument was used to collect the quality of life (QoL) data at the first date of admission. Quality of life of diarrheal children was measured as proxy report from caregiver while QoL of caregiver was measured as self-report. The raw data was converted to utility values using the Thai algorithm. The clinical severity of diarrheal children was rated using the Vesikari clinical severity scoring system. Stepwise multivariate linear regression was applied to explore the impact of the various factors on the utility value of children and